AIDS and Pure Red Cell Aplasia

To the Editor: The letter from Majluf-Cruz et al. [1] describes two AIDS patients who developed pure red cell aplasia (PRCA). The authors suggest that PRCA may be related either to the underlying HIV infection or to antiretroviral medications, and they recommend corticosteroid treatment for these already immunocompromised patients.

We wish to point out an alternative explanation for PRCA in these cases. At the time that the hematologic abnormality occurred, the first patient was on trimethoprim/sulfamethoxazole (TMP/SMX) prophylaxis and the second patient had recently started toxoplasmosis treatment that probably included a sulfonamide. We recently described delayed hematologic toxicity in HIV-infected patients who had undergone desensitization to TMP/SMX (co-trimoxazole), and we termed this iatrogenic finding co-trimoxazole desensitization syndrome, or CODS [2]. In fact, one of our patients with CODS developed PRCA, and this complication has previously been associated with sulfonamide therapy [3]. Thus the patients described by Majluf-Cruz et al. [1] may have had similar hematologic toxicity from sulfonamide treatment.

A logical remedy would be to discontinue the sulfonamide medication. This approach avoids the additional immunosuppressive effects of corticosteroids in AIDS patients. In view of the increasing concern with iatrogenic complications of HIV therapy [4], medication-induced hematologic toxicity should be carefully considered and avoided in HIV-infected patients.

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Paroxysmal Nocturnal Hemoglobinuria in the Chinese

To the Editor: Paroxysmal nocturnal hemoglobinuria (PNH) is an acquired clonal hematopoietic disorder affecting a pluripotential stem cell. The disease is characterized by intravascular hemolysis, hemoglobinuria, and the lack of glycosylphosphatidylinositol (GPI)-linked surface proteins in affected blood cells [1], owing to somatic mutations involving the gene PIG-A [2]. The clinical course of PNH, as reported in Western patients, is dominated by bone-marrow aplasia, thrombosis, and hemorrhage [3]. Little is known about PHN patients of other ethnic groups. We report on our experience of a consecutive series of 9 Chinese patients with PNH.

Nine Chinese patients with PNH were seen between 1976–1996. Pathologic diagnoses of these patients were confirmed by a positive Ham's test and flow cytometric demonstration of deficiency of GPI-linked proteins. There were 6 men and 3 women. The median age at diagnosis was 32 (range, 20–44) years. One patient died 5 years after diagnosis, while another defaulted after 17 years. The median duration of follow-up was 9 (range, 5–20) years. One patient presented with recurrent abdominal pain after diagnosis, and investigations revealed splenic venous thrombosis and esophageal varices. He died 5 years after diagnosis of cerebral hemorrhage. Another patient, a chronic smoker, had left coronary artery stenosis successfully treated by percutaneous coronary angioplasty. His symptoms had not recurred. Two patients had pulmonary tuberculosis, and one had chronic osteomyelitis that was surgically treated. One patient went through two pregnancies, one successful and the other terminating in intrauterine death because of severe toxemia of pregnancy. No thrombosis was observed in any of these patients, although prophylatic anticoagulation was not given. At the latest follow-up, mild leukopenia ($<3 \times 10^6$/l) and thrombocytopenia ($<100 \times 10^6$/l) were present in 3 patients. Five patients have remained transfusion-dependent, with a median annual requirement of six (range, 5–15) units of blood.

The clinicopathological features of this series of patients were similar in many respects to those of Western patients (Table I). Patients presented mostly in the third decade, with 44–66% of patients showing cytopenias other than anemia. Two patients (22%) presented initially with aplastic anemia. Both had gradual improvement of hematologic parameters with the onset of PNH. Although PNH has been considered preleukemic, this complication was not observed in the largest series of PNH patients to date [3], nor in our patients.

The major difference in our series is the rarity of thrombotic complications. Only one patient presented with venous thrombosis. Furthermore, our patients went through pregnancies and operations, which were additional risk factors for thrombosis, without complications despite the lack of anticoagulation. In another series of 40 Chinese patients with PNH, thrombosis was seen in only 7% of cases [5]. This is in contrast to the reported frequency of 39–62% of thrombosis in the West [3,4]. In view of the high frequency of potentially fatal thrombosis in Western patients, it has been recommended that all PNH patients receive prophylatic anticoagulation [3]. However, we think that this is unwarranted in Chinese PNH patients, who have a low risk of thrombosis. Furthermore, PNH appears to run a benign course in Chinese patients. For this reason, conservative treatment should be given. Without other good indications, aggressive treatment modalities, including bone-marrow transplantation, should not be recommended.

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